

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Transportation Specialist I**

**Class Code: 11471**

**Pay Grade: GJ**

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### **A. Purpose:**

Transportation Specialists I are located in the various programs of a comprehensive project management system; and they apply the policies and procedures of the programs in which they are located to the planning, development, construction, and maintenance of transportation projects. Transportation Specialists I also manage internal and public service transportation programs by developing policies and procedures to implement program goals and objectives, enforce program guidelines, and provide support to the department and program services to the public.

### **B. Distinguishing Feature:**

**The Transportation Specialist I** develops an assigned segment of transportation projects according to the purpose and guidelines of a project management program; or they manage a transportation operational or public service program.

**The Transportation Specialist II** manages project development in a project management program by establishing operating procedures, developing and implementing systems of control to track project activities and timelines, and providing direction to program and department staff; or they create long-range transportation plans; or they manage multiple internal or public service transportation programs.

### **C. Functions:**

*(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)*

1. Manages a transportation program by developing an operating system to provide services to the public.
  - a. Completes grant applications to secure federal funds.
  - b. Develops, implements, and enforces policies and procedures to facilitate program activities.
  - c. Evaluates and recommends approval of subgrant applications, and allocates budgets to projects.
  - d. Provides technical direction to program users to assist them in developing and implementing projects in compliance with guidelines; and writes and maintains procedure manuals.
  - e. Monitors federal regulations for impact on grants and implements changes throughout the program.
2. Manages a transportation program by interpreting and applying department guidelines to carry out the department's business.
  - a. Maintains data management systems by establishing and implementing data collection procedures, and creating a department-wide network of data collection.
  - b. Analyzes data to ensure current and correct supporting information for department decisions and for use in planning, design, development, and maintenance of the transportation system.

- c. Manages real and personal property owned by the state by maintaining inventories of properties, leasing and disposing of property, and ensuring property is maintained.
3. Applies program guidelines to transportation projects in preliminary stages to define, record, and control the work that is included in the project.
    - a. Procures information and reports on roadway needs, pavement conditions, and currently scheduled transportation projects.
    - b. Conducts research to respond to inquiries raised during project scoping inspections.
    - c. Develops a written statement that documents decisions made during scoping inspections; distributes the information; and ensures decisions are instituted and requests are fulfilled.
    - d. Documents specific project activity sequences, activity durations, and resource requirements to create a schedule of projects.
    - e. Verifies project information, analyzes project costs, determines funding categories and levels, and prepares a database of projects.
  4. Applies program guidelines to transportation projects in preliminary stages to provide estimates of the costs of procedures and materials.
    - a. Prepares a conceptual drawing of proposed projects prior to survey and development of project-specific details to determine approximate material quantities; and assigns cost estimates to materials, potential material sources, and material transportation.
    - b. Estimates costs of construction activities and materials to repair roadways, using existing plans and historical cost data.
    - c. Reviews plans for resurfacing projects to identify type of improvement, and estimates costs.
    - d. Updates average costs of each type of construction material and other bid items annually by compiling average low bids submitted by contractors for construction projects for the year past and updating computer files.
  5. Applies program guidelines to transportation projects in preliminary stages to ensure transportation projects are good to go at bid letting and construction.
    - a. Compiles information from internal systems, reports, and meetings to prioritize notification to utility companies and cities regarding pending transportation projects.
    - b. Works with utility companies in project corridors to ascertain the extent of the impact on their facilities, and determine possible alternatives.
    - c. Evaluates utilities' cost estimates for relocation of facilities and determines which items are reimbursable according to department standards.
    - d. Determines if relocation of utility is adequate to avoid proposed and future construction of the roadway.
    - e. Negotiates and prepares utility relocation agreements between the state and utility companies, and obtains the necessary state, federal, and utility approvals of the agreements.
    - f. Certifies to the program manager that utility issues have been addressed by determining that necessary agreements have been made and special requirements noted for each project.
    - g. Creates a detailed cost budget of bid items for each transportation project being prepared for bidding to contract.
    - h. Updates project data systems by entering and verifying project-specific products, procedures, and costs.
    - i. Compares contractors' bidding proposals to the requirements of the contract being

let, and verifies accuracy and eligibility.

6. Applies program guidelines to transportation projects in construction stages to ensure project quality management.
  - a. Reviews project plans, proposals, and shop drawings to identify and summarize material and specification requirements for each project.
  - b. Interprets material and testing requirements and specifications for field staff; and assists them to comply with documentation procedures.
  - c. Reviews project documentation regarding material certification, sampling, and testing; determines compliance with applicable specifications; and notifies project personnel of necessary corrective actions.
  - d. Reviews final project documentation to ensure material testing and sampling requirements have been met and reported; and prepares a material certification letter.
  - e. Conducts reviews of construction activities to determine conformance with plans, policies, and procedures; and makes recommendations for remedial action for nonconformance.
  - f. Checks project files for appropriate documentation, and checks documentation for accurate computations.
  - g. Compares field documentation for quantities in place with payment estimates.
  - h. Performs field measurements of work in place.
  - i. Observes material sampling and testing procedures, and construction signing and traffic control.
  - j. Conducts certification training courses for inspectors; and maintains training manuals.
  - k. Trains technicians in the use, maintenance, transportation, storage, and emergency response of nuclear gauges; and ensures gauges are maintained according to federal guidelines.
7. Applies program guidelines to transportation projects in construction stages to ensure construction is accomplished in compliance with plans and specifications.
  - a. Looks ahead at upcoming procedures on assigned projects and recommends personnel and equipment needs.
  - b. Coordinates and prioritizes project activities, and assigns and prioritizes work to staff to accommodate contractors' schedules.
  - c. Recommends changes in plans, specifications, and procedures because of natural obstacles on project sites, quality of materials in the field, etc.
  - d. Coordinates project activities with contractors, other agencies, local governments, utility companies, landowners and business owners, and the traveling public.
  - e. Interprets plans for contractors and staff to ensure proper understanding and implementation of the project purpose.
  - f. Provides work direction to project staff, oversees quality testing, answers their questions, checks their calculations and work, and provides training in procedures.
  - g. Inspects contractors' activities during construction, accepts or rejects procedures and materials, develops corrective actions to achieve acceptance, or stops contractors' work.
  - h. Prepares work progress reports, calculates payment estimates, documents quantities, prepares and justifies construction change orders, and keeps project diaries.
  - i. Processes finaling of contracts by acquiring project documentation; checking project quantities and recommending payment; completing final construction change orders; and signing off on projects as built.

8. Performs administrative functions as required by program guidelines and to support department and program integrity.
  - a. Develops and maintains documentation in compliance with department record keeping requirements; and prepares reports on program activities and overall effect.
  - b. Maintains program integrity by recommending and incorporating changes in guidelines; evaluating program efficiency and effectiveness and developing and implementing corrective actions, enhancements, and expansions; and writing manuals on procedures and program purpose.
  - c. Conducts and participates in public meetings and hearings to provide and obtain information about transportation projects and program services.
  - d. Provides information and answers to questions about program activities.
  - e. Develops and implements standards, policies, and procedures to ensure implementation of program goals and objectives.
  - f. Develops and administers program budgets, including allocation of money to subgrants.
9. Performs other work as assigned.

#### **D. Reporting Relationships:**

Reports to a Program Manager, Area Engineer, or Division Director. Does not typically supervise, but routinely provides program direction and technical expertise to staff, managers, and the public.

#### **E. Challenges and Problems:**

Challenged to complete project work in a timely manner. This is difficult because there are multiple projects occurring at the same time; it requires adequate knowledge of multiple, current, department and technical guidelines; information needed from other entities is not always forthcoming; plan information may be incomplete or incorrect; and there are often changes in projects and in project scheduling. Further challenged to identify and implement new program concepts. This is challenging because it requires that program participants must be notified and convinced to change in order to comply with federal requirements, and monitored to ensure changes are made.

Problems include maintaining status of program services when funding decreases; conveying program purpose to the public in an understandable manner; monitoring program compliance when grantees are groups or organizations whose members change and a spokesman is often difficult to locate; maintaining knowledge of the industry; negotiating changes with entities impacted by projects and maintaining cost efficiency; developing innovative procedures to collect, analyze, and summarize data; interpreting historical trends and their impact on surrounding project characteristics; disseminating new technology throughout the department; maintaining control of multiple projects simultaneously; finding resolutions to construction problems before they accelerate; and dealing with unanticipated problems daily.

#### **F. Decision-making Authority:**

Decisions include recommendations for policies and procedures; recommendations for approval of subgrants and allocation of funds; whether changes in federal regulations have an impact on program activities and the resulting course of action; data collection methodologies; whether

data is viable for decision-making and project development; whether utility relocation proposals are acceptable and costs meet guidelines; which factors for specific projects influence costs of items of work; projects on which to conduct quality reviews and which construction items to review; whether project documentation is complete and correct; recommendations for corrective actions for non-compliance; staffing recommendations for assigned projects; whether contractors' work is in compliance and whether to stop work.

Decisions referred include final approval of policies and procedures, subgrants, bidding documents and estimates, plan changes, authorization to move utilities, higher than typical costs, pay estimates, work progress reports, construction change orders, force account work, and contract acceptance; whether quality review findings require correction; whether to reject a bidding proposal; resolution of contract disputes which cannot be resolved with contractors; and alterations in project scope.

#### **G. Contact with Others:**

Daily contact with department personnel to exchange information on projects, coordinate work, and offer technical advice; with outside entities impacted by projects to obtain details on relocation plans and cost estimates and to negotiate agreements; with grantees to provide assistance and monitor grant projects, and with other state agencies to coordinate program efforts; weekly contact with field engineering managers to schedule operations reviews; with material suppliers to solicit certification data and clarify information on specifications; with department managers to provide information regarding project scheduling; with other programs in the department to coordinate projects into scheduling; and with the public to answer program questions; monthly contact with the federal government to answer questions about the program in the state; occasional contact with Bureau of Indian Affairs to incorporate BIA-sponsored projects into scheduling; and with Metropolitan Planning Organizations to incorporate MPO projects into scheduling.

#### **H. Working Conditions:**

Works in a typical office environment; and on project sites with exposure to traffic, equipment, and weather.

#### **I. Knowledge, Skills, and Abilities:**

Knowledge of:

- construction management procedures and terminology;
- material applications, procedures, sampling, and testing;
- computer systems and applications;
- project sequences;
- cost estimating;
- grant writing;
- fiscal and personnel policies and procedures.

Ability to:

- read, interpret, and implement construction plans and technical reports and convey information to others;
- read, interpret, and implement department specifications;
- interpret federal program policies and develop and implement state policies and procedures from that interpretation;

- establish working relationships with a variety of individuals;
- communicate information clearly and concisely.